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EXAMINER	
YANG, RYAN R	

ART UNIT	PAPER NUMBER
2628	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/693,673	BEDA ET AL.	
	Examiner	Art Unit	
	Ryan R. Yang	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35 and 65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35,65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/30/2007 has been entered.

2. This action is responsive to communications: Amendment, filed on 10/30/2007. This action is non-final.

3. Claims 1-35 and 65 are pending in this application. Claim 1 is independent claims. In the Amendment, filed on 10/30/2007, claim 1 was amended, and claim 65 was added.

This case is a CIP of 10/402,268, filed 3/27/2003.

4. The present title of the invention is "Visual and scene graph interface" as filed originally.

Specification

5. Claim 4 is objected to because of the following informalities: "place a drawing visual into the scene graph" is not taught in the specification. Appropriate correction is required.

Claim 5 is objected to because of the following informalities: "causing a drawing context to be returned" is not taught in the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 4, 5, 17 and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by Schneider et al. (6,919,891).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As per claim 1, Schneider et al., hereinafter Schneider, discloses in a computing environment in which program code is received for one or more objects, a computer-implemented method comprising:

receiving a function call ("The apply node that connects the root container with the parameterized graph container 806 provides the parameterized graph container 806 with a value for its first parameter. By analogy, if a parameterized graph container is a defined function or subroutine, the apply node may be considered as a function call that provides the parameters", column 25, line 1-6) corresponding to the program code in a high level graphics markup language at a visual application programming interface layer (Figure 2, item 200 is a visual interface layer) in a format which enables the function call to be placed directly to the application program interface layer wherein the application programming interface layer includes a high-level composition and animation engine (Figure 2, item 206) which further includes a caching data structure comprising a scene graph of hierarchically-arranged objects (Figure 3, item 300);

responding to the function call by causing data in the scene graph to be modified ("A parameterized scene graph provides mutable animated) values and parameterized graph containers such that an application program or the like can selectively change certain aspects of the scene graph description while leaving other aspects intact" (Abstract); and

displaying the scene graph on a display (Figure 1, item 191).

8. As per claim 4, Schneider demonstrated all the elements as disclosed in the rejected claim 1, and further discloses causing data in a scene graph data structure to be modified comprises invoking code to place a drawing visual into the scene graph (column 17, line 23-60).

9. As per claim 5, Schneider demonstrated all the elements as disclosed in the rejected claim 4, and further discloses causing a drawing context to be returned, the drawing context providing a mechanism for rendering into the drawing visual (column 17, line 23-60).

10. As per claim 17, Schneider demonstrated all the elements as disclosed in the rejected claim 4, and further discloses causing data in a scene graph data structure to be modified comprises invoking code related to hit-testing a visual in the scene graph data structure (column 12, line 80-83).

11. As per claim 65, Schneider demonstrated all the elements as disclosed in the rejected claim 4, and further discloses the method further includes the high-level composition and animation engine instructions to a low-level compositing and animation engine and which is thereafter sent to a graphics subsystem (Figure 3, item 206, 210 and 212).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 2-3, 6-16 and 18-35 rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider et al. as applied to claim1 above, and further in view of Demsey et al. (2004/0093604).

Regarding claim 2, Schneider demonstrated all the elements as disclosed in the rejected claim 1.

It is noted that Schneider does not explicitly disclose causing data in the scene graph to be modified comprises causing initialization of a new instance of a visual class, however, this is known in the art as taught by Demsey et al., hereinafter Demsey. Demsey discloses a method of accessing drawing resource n which a new instance of visual class was used [i.e. "class library"]. (See [22-23].

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual class could be used for the purpose of generating different instance.

14. Regarding claim 3, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 2, and Demsey further discloses that causing data in the scene graph to be modified comprises invoking code to associate a transform [i.e. "scale"] with a visual object in the scene graph. (See [21]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual class could be used for the purpose of changing an image.

15. Regarding claim 6, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 2, and Demsey further discloses that causing data in the scene graph to be modified comprises invoking code to associate brush ["brush"] data with a visual object in the scene graph. (See Fig 2, Fig 4, [18],[56],[60]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual class could be used for the purpose of generating different instance.

16. Regarding claim 7, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 6, and Demsey further discloses that the brush data comprises receiving data corresponding to a solid color ["color"]. (See Fig 6, [18]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual class could be used for the purpose of generating different color.

17. Regarding claim 8, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 6, and Demsey further discloses that receiving brush data comprises receiving data corresponding to a linear gradient ["gradient"] brush and a stop collection comprising at least one stop. (See [18]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual class could be used for the purpose of generating different instance.

18. Regarding claim 9, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 6, and Demsey further discloses that receiving brush ["brush"] data comprises receiving data corresponding to a radial gradient ["gradient"] brush. (See [18]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual class could be used for the purpose of generating different instance.

19. Regarding claim 10, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 6, and Demsey further discloses that receiving brush ["brush"] data comprises receiving data corresponding to an image. (See Fig 3-4, Fig 6, [18],[33]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different instance.

20. Regarding claim 11, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 10, and Demsey further discloses that receiving a function call via an interface corresponding to an image effect [i.e. new draw parameter] to apply to the image. (See [23],[25],[28],[79],[91], Fig 1).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different instance.

21. Regarding claim 12, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that receiving pen data

in association with the function call, and wherein causing data in a scene graph data structure to be modified comprises invoking a pen function ["pen"] that defines an outline of a shape. (See [6],[18],[34],[39],[56],[60]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different instance.

22. Regarding claim 13, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to represent an ellipse [i.e. "circle", as ellipse is one of type in "circle" shape] in the scene graph data structure. (See [39], [45]

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

23. Regarding claim 14, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to represent a rectangle ["rectangle"] in the scene graph data structure. (See [18],[33],[39],[45]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey

discloses a new visual object could be used for the purpose of generating different scene graph structure.

24. Regarding claim 15, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to represent a path [i.e. "thickness of a primitive line"] in the scene graph data structure. (See [90], claim 38).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

25. Regarding claim 16, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to represent a line ["line"] in the scene graph data structure. (See [18],[90]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

26. Regarding claim 18, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a

scene graph data structure to be modified comprises invoking code to transform [i.e. "scale"] coordinates of a visual in the scene graph data structure. (See [21]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

27. Regarding claim 19, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to calculate a bounding box [i.e. "boundary"] of a visual in the scene graph data structure. (See [8],[32],[43-45].

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

28. Regarding claim 20, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to place a visual object in the scene graph data structure. (See [31]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey

discloses a new visual object could be used for the purpose of generating different scene graph structure.

29. Regarding claim 21, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that invoking a visual manager to render a tree of at least one visual object to a rendering target [i.e. "hierarchical data structures"]. (See [79],[91]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

30. Regarding claim 22, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to place a container [i.e. "boundary"] object in the scene graph data structure, the container object configured to contain at least one visual object. (See [8],[32],[43-45]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

31. Regarding claim 23, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a

scene graph data structure to be modified comprises invoking code to place image data into the scene graph data structure. [(See [31])

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

32. Regarding claim 24, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 23, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to place an image effect [i.e. image modification] object into the scene graph data structure that is associated with the image data. (See Abstract, [7-8],[33].

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

33. Regarding claim 25, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to place data corresponding to text ["text"] into the scene graph data structure. (See [18]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey

discloses a new visual object could be used for the purpose of generating different scene graph structure.

34. Regarding claim 26, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to provide a drawing context in response to the function call. (See [31]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

35. Regarding claim 27, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 26, and Demsey further discloses that the function call corresponds to a retained visual, and further comprising, calling back to have the drawing context of the retained visual returned to the scene graph data structure [i.e. "drawing resource can be displayed..."]. (See [31]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

36. Regarding claim 28, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to place a three-

dimensional ["resource dimension"] visual into the scene graph data structure. (See [90]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

37. Regarding claim 29, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 28, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to map a two-dimensional surface onto the three dimensional visual [i.e. "the drawing resource dimension portion"; 708]. (See [90].

38. Regarding claim 30, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to place animation data [i.e. "video"] into the scene graph data structure. (See Abstract, [7-8],[33],[101]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

39. Regarding claim 31, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 30, and Demsey further discloses that communicating

timeline [i.e. "time frame"] information corresponding to the animation data to a composition engine. (See [48-49],[56]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

40. Regarding claim 32, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 31, and Demsey further discloses that the composition engine interpolates graphics data based on the timeline [i.e. "time frame"] to animate an output corresponding to an object in the scene graph data structure. (See [48-49],[56]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

41. Regarding claim 33, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that receiving a function call via an interface comprises receiving markup [i.e. "XML"], and wherein causing data in a scene graph data structure to be modified comprises parsing the markup into a call to an interface of an object. (See [81]).

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey

discloses a new visual object could be used for the purpose of generating different scene graph structure.

42. Regarding claim 34, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to place an object corresponding to audio ["speaker"] and/or video ["video"] data into the scene graph data structure. (See [101].

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

43. Regarding claim 35, Schneider and Demsey demonstrated all the elements as disclosed in the rejected claim 1, and Demsey further discloses that causing data in a scene graph data structure to be modified comprises invoking code to change a mutable value [i.e. "characteristic parameter information"] of an object in the scene graph data structure. (See Fig 6, [24],[33],[41-45]

Thus, it would have been obvious to incorporate the teaching of Demsey into Schneider because Schneider discloses a method of changing a graph and Demsey discloses a new visual object could be used for the purpose of generating different scene graph structure.

Response to Arguments

44. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Inquiries

46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan R. Yang whose telephone number is (571) 272-7666. The examiner can normally be reached on M-F 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ryan Yang/
Primary Examiner
January 5, 2008